

02017

New OARDC

1980

MUSKMELON CULTIVAR EVALUATION TRIALS

Dale W. Kretchman, Mark A. Jameson and Charles C. Willer

P180
M210

Department of Horticulture
Ohio Agricultural Research and Development Center
U.S. 250 and St. Rt. 83, South
Wooster, Ohio 44691

639
043

This page intentionally blank.

Muskmelon Cultivar Evaluation Trials for 1980

Dale W. Kretchman, Mark A. Jameson, and Charles C. Willer
Department of Horticulture
Ohio Agricultural Research and Development Center

Muskmelon cultivars were evaluated during the summer of 1980 at the Ohio Agricultural Research and Development Center Vegetable Crops Branch near Fremont. Twelve lines and hybrids were compared in replicated plots. Nine lines and hybrids were observed in non-replicated plots.

Cultural Information

Plant Growing: Seeds were sown in 2 1/4 in. sq. peat pots on May 5. Pots contained a mixture of 1/3 each, soil, peat and sand. Two plants were grown per pot. Plants were field set by hand on June 6.

Field Culture: 400 lb/A of 10-20-20 was broadcast and worked in prior to planting. Also, 150 lb/A of 6-24-12 was drilled in the row prior to laying the plastic. Four-ft. wide, 1.5 mil black plastic mulch was laid on 6 ft. centers immediately before transplanting. Rows were 30 ft. long and the 2-plant pots were spaced 30 in. apart. There were 3 replications of each cultivar in the replicated trial. One-half pint of starter solution of 6 lb/100 gal. of 11-48-0 was added to each hill at planting. Vegiben 2E was sprayed between the plastic at 2 lb/A for weed control. All other cultural practices during the season were according to standard recommendations and no serious insect, disease or weed problems occurred.

<u>Rainfall:</u>	June 6 to 30	2.77 in.
	July	4.63 in.
	August	6.91 in.
	to September 12	0.84 in.

Harvest: Started August 11 and continued through September 12.

Results and Discussion

Yield, grade and fruit size results for the first 10 days after the start of harvesting of the earliest cultivar and the total season's harvest from the replicated trial are summarized in Table 1. There are some obvious differences between cultivars and lines.

Yield, grade and fruit size results from the observational trials are summarized in Table 2.

Some of the cultivars and lines do not have deep ribbing or sutures, or heavy netting and growers should consider their market requirements when selecting some of these lines or cultivars. Occasionally, a cultivar or line may have some other exceptional attribute such as earliness, very high quality, very good holding or shipping ability or resistant to certain diseases that would make it highly desirable for certain locations or uses.

SEED SOURCE

Cultivar or Line	Lot Number	Source
Burpee Hybrid	----	W. Atlee Burpee Co., Philadelphia, PA.
Gold Star Hybrid	562-269	Joseph Harris Co., Rochester, NY
Sweet-N-Early	----	W. Atlee Burpee Co., Philadelphia, PA.
Summet Hybrid	VGR 9008	Asgrow Seed Co., Orange, CN
Harmony Hybrid	WTA 683	Asgrow Seed Co., Orange, CN
Perfection	195	Stokes Seed, Inc., Buffalo, NY
Honeyloupe	190B	Stokes Seed, Inc., Buffalo, NY
Earlidew	194	Stokes Seed, Inc., Buffalo, NY
Top Score Hybrid	0661007	Peto Seed Co., Saticoy, CA
Roadside Hybrid	0351000	Peto Seed Co., Saticoy, CA
Topset	057	Peto Seed Co., Saticoy, CA
G-25VB	77662-276	Joseph Harris Co., Rochester, NY
PCNVB	6149	Joseph Harris Co., Rochester, NY
CTVB	6159	Joseph Harris Co., Rochester, NY
GQVB	6139	Joseph Harris Co., Rochester, NY
NCX-767	79-4898	Niagara Div.FMC Corp., El Macero, CA
NCX-766	79-4916	Niagara Div.FMC Corp., El Macero, CA
NCX-756	45768	Niagara Div.FMC Corp., El Macero, CA
XPB-771	WTR-689	Asgrow Seed Co., Orange, CN
PSX-5077	----	Peto Seed Co., Saticoy, CA
S221	----	Stokes Seed, Inc., Buffalo, NY

All publications of the Ohio Agricultural Research and Development Center are available to all on a nondiscriminatory basis without regard to race, color, national origin, sex or religious affiliation.

12/80-S444/300

TABLE 1. Harvest date, yield, grade and fruit size of muskmelon,
replicated trial, Fremont - 1980

Cultivar	First harvest date	Yield for period Aug. 11-21			Season Total Yield		
		Marketable Fruit			Marketable Fruit		
		cwt/ A	size (lb)	% culls	cwt/ A	size (lb)	% culls
Burpee	8/18	97.8	5.3	9.7	450	5.7	25.6
Gold Star	8/18	108.3	5.9	4.8	520	5.8	15.5
Sweet-N-Early	8/11	260.1	3.1	8.8	578	3.4	18.0
Summet	8/18	29.4	4.0	41.7	449	5.2	12.4
Perfection	8/11	83.4	4.7	48.4	360	5.2	44.1
Honeyloupe	8/23	0	0	0	200	4.9	51.8
Earlidew	8/19	245.5	6.7	22.5	355	6.0	42.6
Top Score	8/19	9.2	3.8	11.1	380	5.1	21.0
Roadside	8/18	57.6	7.2	42.6	410	8.3	36.4
G25VB	8/20	3.8	4.7	0	488	7.3	13.7
PCNVB	8/11	204.7	8.4	8.8	567	8.6	19.4
LSD 5%		66	---	28.6	75	0.53	13.1

TABLE 2. Harvest date, yield, grade and fruit size of muskmelon,
observation trials, Fremont - 1980

Cultivar	First harvest date	Yield for period Aug. 11-21			Season Total Yield		
		Marketable Fruit			Marketable Fruit		
		cwt/ A	size (lb)	% culls	cwt/ A	size (lb)	% culls
NCX-767	8/20	87	5.1	0	207	5.3	8.0
NCX-766	8/18	19	3.8	22.2	338	4.4	5.7
NCX-756	8/14	60	3.1	14.2	278	4.3	5.7
XPH-771	8/13	114	4.3	0	468	4.8	3.4
PSX-5077	8/20	64	4.4	0	456	4.7	8.6
Topset	8/25	0	0	0	219	4.3	25.3
CTV B	8/21	34	7.0	0	198	8.2	41.4
GQVB	8/21	16	6.7	68.6	475	10.3	23.4
S-221	8/27	0	0	0	246	6.8	54.8

TABLE 3. Additional observations on external fruit quality of muskmelon variety trials, Fremont, 1980

Cultivar or Line	Notes on Fruit
Burpee	Round fruit, moderate to deep ribbing, light netting, standard variety in trial.
Gold Star	Round fruit, deep ribbing, deep netting, second standard variety in trial.
Sweet-N-Early	Round fruit, slight ribbing, shallow netting, small fruit, early and worthy of trial in Ohio.
Summet	Round fruit, ribbed, moderate netting, fair potential in Ohio, large seed cavity.
Harmony	Very oblong fruit, ribbed, moderate netting, not type desired in Ohio.
Perfection	Tends to be flat, ribbed, moderate netting, cracks at maturity, not adapted to Ohio.
Honeyloupe	Honeydew type, many skin blemished, cracks, not adapted to Ohio.
Earlidew	Oval round fruit, good size, cracks when ripe, honeydew type that slips, appears not adapted to Ohio.
Top Score	Round fruit, non-ribbed, deep netting, splits at maturity, probably not adapted to Ohio.
Roadside	Round fruit, ribbed, moderate to poor netting, very large seed cavity, extremely large fruit, may have promise for roadside market.
Top Set	Round fruit, non-ribbed, heavy shallow netting, very late, cracks, not adapted to Ohio.
G25VB	Round fruit, deep ribbing, good netting, dark green between ribs, fair potential for Ohio, large seed cavity.
PCNVB	Flat fruit, ribbed, moderate netting, very large seed cavity, of questionable potential in Ohio.
CTVB	Elongated fruit, non-ribbed, very heavy netting, not adapted to Ohio.
GQVB	Ribbed, very light netting, cracks severely, not adapted to Ohio.
NCX-767	Elongated fruit, non-ribbed, very heavy net, western-type melon, not adapted to Ohio.
NCX-766	Slight ribbing, deep netting, good uniformity, western-type melon, worthy of further trial.
NCX-756	Slight ribbing, deep netting, fair uniformity, appears not adapted to Ohio.
XPH-771	Ribbed, moderate netting, worthy of further trial.
PSX-5077	Slight ribbing, heavy netting, fair uniformity, fruit somewhat oblong, may crack at maturity.
S-221	Very large fruit, deep ribbing, moderate netting, very late, cracks, not adapted to Ohio.

This page intentionally blank.

This page intentionally blank.